

WE CLAIM:

1. An ink cartridge refill system configured to refill an ink chamber of an printer ink cartridge with ink, the system comprising:
 - an ink container configured to be coupled to the ink cartridge, the ink cartridge defining at least one internal ink tank;
 - a drain conduit extending between the internal ink tank of the ink container and the ink chamber of the printer ink cartridge;
 - a vent member; and
 - a pressure varying means configured to alter a pressure condition in the internal ink tank of the ink container thereby creating ink flow in the drain conduit.
2. The system of claim 1, wherein the ink container includes a plurality of internal ink tanks, each ink tank being fitted with drain and vent conduits and a pressure varying means.
3. The system of claim 1, wherein the vent member includes a vent conduit extending between the internal ink tank of the ink container and the ink chamber of the printer ink cartridge.
4. The system of claim 1, wherein the pressure varying means is a pump.
5. The system of claim 1, wherein the pressure varying means is a pliable portion of a wall of the ink container.
6. The system of claim 1, wherein the pressure varying means is a deformable air bladder.
7. The system of claim 1, wherein the pressure varying means increases pressure in the ink tank.

8. An ink cartridge refilling system configured to refill a housing interior of a printer ink cartridge, the system comprising:

an ink container having at least one ink reservoir and configured to be connected to the printer ink cartridge housing;

at least one ink communication path coupling the ink reservoir in ink flow communication with the printer ink cartridge housing interior;

at least one vent communication path coupling the ink reservoir in air flow communication with the printer ink cartridge housing interior; and

a pump that can be actuated to initiate ink flow in the drain conduit.

9. The system of claim 8, wherein said ink communication path comprises an elongated ink conduit extending from the at least one ink reservoir into the ink cartridge housing interior.

10. The system of claim 8, wherein the ink communication path includes an ink flow aperture connecting the ink reservoir with the ink cartridge housing interior.

11. The system of claim 8, wherein the pump is mounted to an exterior surface of the ink container.

12. The system of claim 8, wherein the pump includes a deformable air-filled bladder member.

13. The system of claim 8, wherein the ink container includes a plurality of ink reservoirs, each ink reservoir being fitted with drain and vent conduits and a pressure member.

14. The system of claim 8, wherein the pump includes a flexible, resilient housing defining an internal chamber that is in fluid communication with the at least one ink reservoir.

15. The system of claim 8, wherein the pump includes a button shaped actuating member that can be depressed to initiate ink flow.

16. An ink cartridge refilling system configured to refill a housing interior of a printer ink cartridge, the housing interior being configured to contain at least one variable volume of ink defining a variable ink level within the housing, the system comprising:

- an ink container having at least one ink reservoir configured to retain a variable volume of ink and a variable air pressure;

- an ink communication path configured to couple the at least one ink reservoir in ink flow communication with the printer ink cartridge housing interior, for providing an flow pressure in the ink communication path;

- a vent opening in the at least one ink reservoir, for air flow communication to the ink reservoir interior; and

- a pressure member configured to alter the flow pressure in the ink communication path to initiate ink flow through the ink communication path from the ink reservoir to the cartridge housing interior, which ink flow provides a change in air pressure within the ink reservoir thereby causing air to flow through the vent opening.

17. A method of refilling an ink chamber of a printer ink cartridge, the housing interior being configured for containing ink to supply to a print head of the ink cartridge, the method comprising steps of:

- coupling an ink container having at least one ink reservoir to the printer ink cartridge;

- coupling the at least one ink reservoir in ink flow communication with the ink chamber;

- coupling the at least one ink reservoir in air flow communication with the ink chamber; and

- varying pressure in the ink reservoir to initiate the ink flow communication.

18. The method of claim 17, further comprising the steps of mounting the printer ink cartridge in a base member and releasably coupling the base member to the ink container.

19. The method of claim 17, further comprising the step of opening refill holes into the housing interior of the printer ink cartridge.

20. The method of claim 19, further comprising the steps of inserting a foam drill into the refill holes and engaging the foam within the housing interior with the foam drill.

21. The method of claim 17, wherein coupling the at least one ink reservoir in ink flow communication includes extending an ink conduit between the ink reservoir and the ink chamber.

22. The method of claim 17, wherein coupling the at least one ink reservoir in air flow communication includes extending an air conduit between the ink reservoir and the ink chamber.

23. An ink refill device, comprising:
an ink container having at least one internal ink tank containing ink;
a drain conduit having an upper opening within the at least one internal ink tank and a lower opening outside of the ink container;
a vent conduit having an upper opening within the at least one internal ink tank and a lower opening outside of the ink container; and
a pressure varying member configured to alter a pressure condition in the at least one internal ink tank.

24. An ink cartridge refill kit, comprising:
a package; and

an ink container positioned in the package, the ink container including an internal ink tank, a drain conduit, a vent conduit, and a pressure varying member, the drain conduit being in ink flow communication with the internal ink tank, the vent conduit being in air flow communication with the internal ink tank, and the pressure varying member being configured to alter a pressure condition within the internal ink tank.

25. The kit of claim 24, further comprising a printer ink cartridge carrying base positioned within the package, the printer ink cartridge carrying base being configured to retain a printer ink cartridge to be refilled with ink from the ink container.

26. The kit of claim 25, further comprising a fill hole opening device positioned within the package, the fill hole opening device being configured to dislodge fill hole plugs covering ink fill holes of a printer ink cartridge.

27. The kit of claim 26, further comprising a foam drill positioned within the package, the foam drill being configured to be inserted into the fill holes and engage foam within the printer ink cartridge.

28. An ink cartridge refill system configured to refill an ink chamber of an printer ink cartridge with ink, the system comprising:

an ink container configured to be coupled to the ink cartridge, the ink cartridge defining at least one internal ink tank, the ink container including at least one flexible side wall;

a drain conduit extending between the internal ink tank of the ink container and the ink chamber of the printer ink cartridge; and

a vent member;

whereby engaging the flexible side wall varies a pressure condition in the internal ink tank of the ink container thereby creating ink flow in the drain conduit.

29. An ink cartridge refill system, comprising:

a drain conduit;
a vent member;
a plastic ink container having at least one internal ink tank; and
a deformable air bladder in fluid communication with the internal ink tank, the air bladder forming an actuating surface accessible at an exterior of the ink container, wherein the actuating surface can be manually engaged to compress the air bladder and vary the pressure in the ink tank to initiate the flow of ink.